

Dabrafenib

Dabrafenib (trade name **Tafinlar**, GSK2118436) is a drug for the treatment of cancers associated with a mutated version of the gene *BRAF*. Dabrafenib acts as an inhibitor of the associated enzyme B-Raf, which plays a role in the regulation of cell growth. Dabrafenib has clinical activity with a manageable safety profile in clinical trials of phase 1 and 2 in patients with BRAF(V600)-mutated metastatic melanoma.^{[1][2]}

The Food and Drug Administration initially approved dabrafenib as a single agent treatment for patients with BRAF V600E mutation-positive advanced melanoma on May 30, 2013.^[3] Clinical trial data demonstrated that resistance to dabrafenib and other BRAF inhibitors occurs within 6 to 7 months.^[4] To overcome this resistance, the BRAF inhibitor dabrafenib was combined with the MEK inhibitor trametinib.^[4] On January 8, 2014, the FDA approved this combination of dabrafenib and trametinib for BRAF V600E/K-mutant metastatic melanoma.^{[5][6]}

1 References

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- [2] Huang, T.; Karsy, M.; Zhuge, J.; Zhong, M.; Liu, D. (2013). "B-Raf and the inhibitors: From bench to bedside". *Journal of Hematology & Oncology*. **6**: 30. doi:10.1186/1756-8722-6-30. PMC 3646677. PMID 23617957.
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- [6] Maverakis E; Cornelius LA; Bowen GM; Phan T; Patel FB; Fitzmaurice S; He Y; Burrall B; Duong C; Kloxin AM; Sultani H; Wilken R; Martinez SR; Patel F (2015). "Metastatic melanoma - a review of current and future treatment options". *Acta Derm Venereol*. **95** (5): 516–524. doi:10.2340/00015555-2035. PMID 25520039.

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